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AUTHOR Yazzie, Tarajean
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ABSTRACT

Educational researchers and practitioners have long advocated adopting a culturally appropriate curriculum to strengthen the education of Native youth. Such an approach uses materials that link traditional or cultural knowledge originating in Native home life and community to the curriculum of the school. Deeply imbedded cultural values drive curriculum development and implementation and help determine which subject matter and skills will receive the most classroom attention. This chapter examines theoretical and practical research studies that support and inform the development of culturally appropriate curriculum for American Indian children in K-12 classrooms. These studies fall into the following areas: (1) historical roots, including the Meriam Report of 1928; (2) theoretical frameworks (modes of linguistic interaction, supportive learning environments, communication and interaction styles of students and teachers); (3) curriculum development (approaches to overcome culture conflict, parent and community involvement, inquiry-based curriculum, role of Native language in concept development, local community issues, appropriate communication with elders); (4) curriculum practice and implementation (characteristics and behaviors of effective teachers, teacher role); and (5) implications for educational research and practice. Contains 64 references. (SV)

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CHAPTER 4

Culturally Appropriate Curriculum
A Research-Based Rationale

TARAJEAN YAZZIE[1]

To clarify our purposes and strengthen our approaches to schooling Native youth, education researchers and practitioners have long advocated adopting a culturally appropriate curriculum. Such an approach uses materials that link traditional or cultural knowledge originating in Native home life and community to the curriculum of the school.[2] Deeply embedded cultural values drive curriculum development and implementation and help determine which subject matter and skills will receive the most classroom attention. This chapter examines theoretical and practical research studies that support and inform the development of culturally appropriate curricula for American Indian children in K-12 classrooms.

Education and Culture

Donald Oliver and Kathleen Gershman observe, "Knowing is said to be the result of learning which comes about as a type of transfer of information from the outside world of nature to the individual self." They suggest that, in Western European thought, this learning and teaching relationship is a "knower-known" dualism. Oliver and

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Gershman consider this view of education problematic because it implies a separation between what is known and the person who holds the knowledge about it. This implied separation negates the nature and "most basic understanding of our being."[3] According to Oliver and Gershman, every individual's culture functions as a perceptual lens, shaping a unique worldview. Culture cannot be separated from everyday experiences through processes; it influences social, political, and intellectual activities.[4]

Jerome Bruner adds that "education is a major embodiment of a culture's way of life, not just preparation for it." In other words, if Indigenous agriculture, jazz music, Broadway theater productions, tribal courts, and medical research are all embodiments of culture, so is schooling. He captures beautifully what is hidden in the struggle to rationalize a culturally relevant curriculum as he links learning and thinking to how cultural knowledge is lived out. According to Bruner, "[It] is culture that provides the tools for organizing and understanding our worlds in communicable ways."[5]

While these scholars have linked culture and education theoretically, Oscar A. Kawagley has written about the deep influence and connectedness of cultural knowledge with the kind of learning in which Yupiaq people (southwestern Alaska) traditionally engage. Culture and knowing are inextricably connected in all aspects of daily life. Thus education is embedded in who Yupiaq people are and how they behave and communicate. Ultimately these relationships have a bearing on the survival of the people.[6]

What Is a Curriculum?

There are many approaches to defining a curriculum, but Wilma Longstreet and Harold Shane suggest that a curriculum can encompass a variety of activities: selecting who should be educated; setting desirable goals for education; choosing appropriate content; and deciding how content should be gathered, organized, developed, taught, and evaluated. But, who are the people engaged in these tasks? The answer for many schools is a team of teachers working with an outside consultant, often isolated from the rest of the school. Afterwards, however, teachers are expected to implement the curriculum.[7]

The picture becomes more complicated as we search for a clearer understanding of what the creators of a curriculum understand it to be. Part of the task is to acknowledge the interrelationships among learning, teaching, and curriculum. Another part is developing better methods for transmitting that knowledge in preservice or in-service teacher education.

An investigation of theories guiding development of a culturally appropriate curriculum will help us understand more about the multiple links connecting curricula with learning and teaching. By examining these theories, we begin to uncover the underlying philosophies and ideologies embedded in the educational goals set by curriculum planners for Native communities.

This chapter is organized into five sections: historical roots, theoretical frameworks, curriculum development, curriculum practice and implementation, and implications for educational research and practice.

Historical Roots

Through the first half of this century, the ideology of assimilation guided curriculum development for American Indian education. American Indian students endured a series of forced introductions to a new "civilized" culture.[8] For decades, they tried to make sense of what they learned in history, math, and reading lessons (including the values and morals embedded in text) while living in a separate society. Carol Locust describes the costs of this policy:

> Discrimination against persons because of their beliefs is the most insidious kind of injustice. Ridicule of one's spiritual beliefs or cultural teachings wounds the spirit, leaving anger and hurt that may be masked by a proud silence. American Indians experience this discrimination in abundance for the sake of their traditional beliefs, especially when such beliefs conflict with those of the dominant culture's educational systems.[9]

Efforts to provide an education that is more respectful of American Indian culture have run hot and cold in the United States. The first discussion that legitimized cultural considerations in Bureau of Indian Affairs (BIA) school curricula began with the release of the

Meriam Report in 1928. The very first paragraph of the report's section on education included this statement:

> The most fundamental need in Indian education is a change in point of view. Whatever may have been the official governmental attitude, education for the Indian in the past had proceeded largely on the theory that it is necessary to remove the Indian child as far as possible from his home environment; whereas the modern point of view in education and social work lays stress on upbringing in the natural setting of home and family life. The Indian educational enterprise is peculiarly in need of the kind of approach that recognizes this principle; that is, less concerned with a conventional school system and more with the understanding of human beings.[10]

In this report, the researchers discussed how the U.S. government had appropriated education policy and practice to transform American Indian people and societies. This historical document represents the first official recognition of the essential roles Native families and cultures play in the learning process. The more than 70 years that have passed since the Meriam Report have brought increased understanding about cultural considerations in curriculum, although not without occasional setbacks. As we approach a new century, educators of Native students continue to work toward improving educational delivery and practice. Our histories help us to see the distance we have come, while we look to current education research for help in making informed decisions about the future of education.

Given this reality, what does research tell us about curricula? What theories underpin cultural considerations in the education of American Indian learners today? For more recent views on how to make a curriculum more effective, I will review theories and research studies that show various ways culture affects student academic performance. Specifically, I will review the works of Frederick Erickson, Susan Philips, and Henry T. Trueba. These studies disclose some of the ways to view the connections among culture, curricula, and instructional practice in American Indian education.[11]

Theoretical Frameworks

Modes of linguistic interactions. Erickson argues there is a difference between how majority and minority students interact linguistically and cognitively. His position is not that one type of linguistic interaction is superior over another, rather students may reach similar understandings via different cognitive and linguistic modes of investigation. He suggests learning is complicated by different modes of interaction, which, if negative, can lead to distrust. Trust—a major component in behavioral interactions—can grow when teachers understand linguistic aspects of their students' cultural backgrounds. Erickson thinks it is important for teachers to find ways to obtain and build trust instead of emphasizing cultural differences. He suggests that a culturally responsive curriculum (including pedagogy) can transform routine educational practice. This view is supported by several studies conducted in Native communities and education settings by other researchers. This growing body of research suggests that better learning occurs when teachers transform their educational practices and the curriculum reflects the home culture from which children come.[12]

Supportive learning environments. Researchers Trueba and Philips also stress the importance of culture as a contributing factor to student performance and positive engagement in the classroom. Culturally appropriate relationships ground children in supportive environments, which help them contend with non-Native cultural values embedded in the school curriculum. Trueba advises educators not to lose sight of the fact that *many* minorities succeed in school *without* losing their cultural identities or assimilating; therefore, teachers should seriously question theories that encourage assimilation or even partial acculturation. Trueba stresses that

> Conditions for effective learning are created when the role of culture is recognized and used in the activity settings during the actual learning process. Ultimately, cultural congruence is not only part of the appropriate conditions . . . for learning effectively. At the heart of academic success, and regardless of the child's ethnicity or historical background, an effective learning environment must be constructed in which the child, especially the minority child, is assisted through meaningful and

culturally appropriate relationships in the internalization of the mainstream cultural values embedded in our school system.[13]

Trueba recognizes that many mainstream values are embedded in the school system, some of which are valued by Native educators, parents, and communities. Educators want Native children to succeed academically. To accomplish this, Trueba argues children need to be more aware of the values embedded in the acts of learning and teaching in American schooling. Trueba is speaking of a bicultural approach that provides a setting that clearly fosters mainstream values yet offers equal recognition of the contributions home cultures bring to the learning situation. Trueba's work informs how others might acknowledge the structure of schools. He does not suggest an assimilation of values; on the contrary, he says the home culture is needed in the classroom to facilitate academic achievement. Minority children need to be able to internalize both their own culture and that of the school.

Communication and interaction styles. Philips's research in the Warm Springs Indian Community focused on culture and its relationship to classroom communication and interaction styles. She compared the interaction of Warm Springs children with Anglo middle-class modes of interaction. The children were reluctant to interact with their teachers and engage with academic content. She views this reluctance as a hindrance in the learning process. Without critical engagement with the curriculum and between teacher and learner, acquisition of knowledge is interrupted and learning is stunted. Philips's research in 1972 and 1983 found that Warm Springs students had been acculturated in their community, which influenced their communication style in the classroom.[14]

Other researchers have emphasized important differences between students and teachers in nonverbal behavior. These studies show that communication differences may bias teachers' interpretations of their students' classroom communication and behavior and lower teachers' expectations of student academic performance.[15]

The educational research literature includes numerous anecdotal reports, position essays, discussions, and debates about how the culture of the dominant society may be incongruent with, conflict with, or impede the schooling of American Indian students. The

reader might ask, Why are these instructional theories important, particularly to the American Indian educational experience? David Wright, Michael Hirlinger, and Robert England explain that schooling experiences for American Indian children are qualitatively different from those of White middle-class learners for whom the American educational system has been constructed. These researchers and a significant number of others have established the link between culture and learning in school settings.[16]

Curriculum Development

Research reports also suggest that a good curriculum created for Indian students should incorporate cultural considerations. Robin A. Butterfield argues that, to reflect the cultures of Indian students and their communities, educators must take into consideration three instructional elements: materials, instructional techniques, and learner characteristics. Other researchers have pointed out the importance of meaningful parental and community involvement. This section highlights some of the research documenting various curriculum development approaches among tribes across the United States.[17]

John M. McQuiston and Rodney L. Brod report that the "Native American student is typically taught by an Anglo teacher through the use of non-Indian language, examples, illustrations, and text materials." Such alien learning situations are common for American Indian students. John Ogbu explains that it is common for "involuntary" minority students to experience conflicts with the American education system. "Voluntary" minorities perceive "the cultural differences they encounter in school as markers of identity to be maintained, not as barriers to be overcome."[18]

Erickson, on the other hand, views minority learning situations through a different lens. He believes people's mannerisms when they speak are also important to consider when trying to understand the cultural conflict minority students experience:

> If the teacher comes from a speech network in which it is expected that listeners will show attention by direct eye contact while listening, and a child comes from a speech network in which it is considered impolite to look directly at a speaker, the

teacher may infer that the child who is listening with averted eyes may be bored, confused, or angry.[19]

Erickson pinpoints what research suggests is the source of cultural conflict in American Indian education. There exists a salient difference in how American Indian students, parents, and communities conduct social and learning interactions in home and in school. These different modes of interacting are not usually described in information available to teachers and school personnel who interact academically with Native students. Informed by such research knowledge, teachers might stand a better chance of creating ways to engage students in learning content material. Better informed teachers and curriculum developers might also find better assessment activities and measures to monitor student learning of content material. Native parents and communities could be very helpful if included in the curriculum and assessment development process.[20]

Bruce A. Birchard studied the perspectives of community members, parents, students, and teachers with regard to Native language, history, and values taught in school. Many of the participants in the study felt some aspects of the tribal heritage and culture should be taught in school; however, most agreed the purpose of a full education is to prepare Indian youth for employment and successful lives in American society. From Birchard's study, we learn that a curriculum for Native children needs to address the expectations of both the Native community and larger society. For example, it is helpful for students to learn in situations where they are not isolated from the larger society, i.e., the curriculum must meet state requirements. Meeting these requirements does not necessarily exclude creative or culturally appropriate curriculum and instruction.[21]

James E. Biglin and Jack Wilson, in their study of Navajo and Hopi parental attitudes toward Indian education, found the same attitudes reported in the Birchard study. Parents in this study emphasized "inclusion of the Navajo/Hopi language [as] most important in the curriculum." Similarly, C. L. Steele conducted a study with parents to identify and organize teachable Mohawk cultural content.[22]

A 1991 study to develop an inquiry-based curriculum found that Navajo parents agreed their children "need the skills and knowledge for full adult participation in the off-reservation economy." Although

the parents disagreed about the best means to achieve this, they were in agreement, regardless of approach, that the school curriculum should reflect Navajo values. Most teachers held the belief that Navajo children "won't respond to questioning!" However, one teacher encouraged the students to participate actively by asking questions that incorporated social knowledge from their backgrounds. The researchers attributed this increase in verbal participation to the familiarity and relevance of the content to students' lives. Navajo students clearly felt comfortable with a classroom dialogue that captured and honored their multiple cultural experiences.[23]

Not only do these studies demonstrate the importance of culture and language in schools serving American Indian students, they indicate that American Indian parental input can assist schools in refining curricula to become more culturally relevant and responsive to students. Relevance of curriculum content seems important to tribal groups, particularly since it is likely to impact academic success. Trueba explains why culturally relevant materials and interactions enhance learning for minority students in unfamiliar classroom situations:

> The transition from assisted to independent performance must be anticipated by the parent, teacher, or more knowledgeable peer, and the assisted performance prior to transition requires (1) effective communication between child and adult/peer, (2) shared cultural values and assumptions, and (3) common goals for activities. . . . Gradually the child understands an activity and meaning and consequences of the activity. Through culturally and linguistically appropriate interaction, the child then develops a suitable cognitive structure that is continuously revised with new experiences and feedback.[24]

Based on her work with Yavapai curriculum development, Teresa McCarty suggests culturally relevant curriculum development places importance on community input and delivery of cultural topics. Her work further supports the need for parental involvement in this process. McCarty's applied research goal with Yavapai and Navajo school programs was to revitalize culture by tapping into language learning.[25]

Other studies have shown the role Native language plays in concept development. Duane Schindler and David Davison believe "more

attention needs to be paid to the structure [and] thought processes of the native language when that language is not English." It is the "cognitive structures of the native language with which [American Indian students] attempt to construct English language analyses," even in cases when particular students may not retain their Native language. For example, Schindler and Davison find that "school mathematics is typically presented using the English language and an English language method of processing." Schindler and Davison suggest that, to address problems in translation, the Crow language bilingual education programs could minimize problems through an "emphasis on teaching Crow speaking children the interrelationships of the mathematics terms and concepts in English and Crow."[26]

Judith Hakes and colleagues conducted a curriculum project to improve the education of Acoma and Laguna Pueblo children. The educational programs in place were not culture based, and an assessment at the beginning of the project found that educational experiences were inadequate. Students indicated the existing curriculum lacked cultural relevance. Factors that contributed to the new project's success were teacher training, cultural relevance, and community involvement. When piloted, the new culturally relevant curriculum reportedly fostered academic improvements.[27]

Educators may be unaware of the complex processes by which American Indian students adapt to school environments. While research indicates parental interest for inclusion of culture in the school curriculum, how and whether to teach tribal cultural knowledge in schools remains controversial. These are philosophical questions that educational communities, students, parents, teachers, and administrators will have to consider, particularly since a majority of the BIA schools have applied to become charter or community-based schools.[28]

Despite growing evidence and beliefs that a curriculum should reflect the culture it serves or, at least, the learning needs of students, Jerry Lipka warns about the difficulties of developing a culturally appropriate curriculum, especially when attempting to use the community as a resource. Lipka's six-year case study reveals that Bayuq (a fictitious name) community educational concerns are not always focused on the traditional aspects of culture, nor should they be. Lipka's work suggests curriculum development interests should

not be limited to traditional Native culture but should include the local climate and politics in which Native youth live. For example, educators might ask how the economic climate of the time affects the lifestyles and livelihood of the people. A successful curriculum developed for the Bayuq reflects community issues related to the *Alaska Native Claims Settlement Act* (ANCSA). Lipka stresses that a culturally relevant curriculum emerging from school and community relations is "more complicated and subtle than simply adding curriculum that is culturally relevant."[29]

Sandra Stokes's work with the Menominee determined, "Although Menominee values would be an integral component of the new curriculum, there was a widespread agreement that the children on the Menominee reservation needed to become cognizant of the values other than their own as well as how the Menominee values fit into the concept of values in general."[30]

Lipka cautions curriculum developers to consider the following challenges:

- establishing trust in situations where tension between school and community is common;
- overcoming assumptions that the school or university knows what is best for the students and community it serves;
- dealing with controversies arising from development of culturally relevant materials, discussion, and knowledge that may be tied to traditional rituals;
- encouraging the community to use the school or university as a resource, not the other way around;
- involving students in timely community efforts such as debates on land rights or Native sovereignty issues, all of which can supplement and even enhance state-required course content.

Lipka's study further demonstrates how even gathering information about culture can conflict with Native life and social rules. For example, Lipka quotes a Yup'ik student researcher, "We talked about how the elders should be approached, knowing full well that it is sometimes difficult to conduct interviews since direct questioning of elders is often perceived as inappropriate behavior." Educators need this type of information when working in communities where simi-

lar principles of communication are fundamentally a part of interviewing community members about cultural knowledge.[31]

Despite a wide array of curricula related to American Indian cultures, most existing literature presents information about *how to learn about* Indians rather than *how to implement* a culturally appropriate curriculum. Researchers have established the need for culturally relevant curricular materials; however, they have done so while a majority of the materials have been widely distributed without appropriate cautions. For example, what may work well for Native Hawaiians may not work for Navajo. The findings of Lynn Vogt and colleagues remind educators serving Indian students of the vast differences among Native groups and cultures. These differences represent an important reason why teachers must take care not to generalize research findings to the Native communities in which they work.[32]

Research focusing on links between culture and curricula indicate that individual tribal cultures are apart from the culture of the larger American society, and distinct in their own right. If gaining in-depth and comprehensive knowledge is the goal of education, then learning about tribal cultures only as they relate to the history and priorities of White American culture underrepresents the parallel but separate knowledge systems of Indian peoples and the many unacknowledged contributions tribal cultures have made and continue to make to the whole society.

Clearly, developing a culturally appropriate curriculum is complex and difficult, and continues to be influenced by our inherited values and ideologies.

Curriculum Practice and Implementation

To serve Native students better, teachers of American Indian children must make a conscious effort to match materials and instructional strategies to the values and ideologies of their students. Stokes suggests that teachers who actively and critically engage in curriculum development may be particularly effective in carrying out appropriate instructional and assessment procedures. Instead of having a curriculum imposed on them, teachers can claim ownership by considering how educational reform can happen from inside the classroom.[33]

As John W. Tippeconnic III asserts, "Without question, the most important relationship within the American educational system develops between teacher and student." Researchers have described methods and programs that prepare teachers to teach Indian children and ways in which teachers demonstrate effectiveness in the classroom. Affective qualities, rather than skills or academic preparation, seem to characterize effective teachers in the research literature. Studies indicate that teachers who serve Native students effectively are informal, are caring and warm, give up authority, and have and show respect for the students.[34]

Qualities that make for effective instruction in Native schools are generally identified but marginally understood. The next step is to create consciousness and deeper understanding of the underlying philosophies of institutions where teachers learn about effective practice. Many teachers are trained in colleges and universities located at a distance from reservations and urban communities where Native culture exists. As students of culture, teachers engage in course work in the humanities, anthropology, religion, social sciences, math, science, and education, which taken together constitute a curriculum. This knowledge frames how teachers will view American Indian students' learning and lives. Because of this, the discussion on appropriate curriculum development should examine the ideologies teachers have internalized during their own schooling and will take with them to schools serving American Indian children. Doing this well requires a careful investigation of teacher education programs of study, teacher observation and reflection on their own practice as cultural workers, and a reassessment of teacher education curricula upon which future teachers will base their instructional approaches.[35]

Implications for Educational Research and Practice

Given the historical foundations of American Indian education and ultimately the purpose of schooling American Indian children, the importance of a culturally appropriate (or responsive) curriculum cannot be denied. Educational researchers have established strong evidence to support inclusion of Native knowledge and lifeways in the K-12 classroom (with the help of Native parents and communities) to create a quality educational experience for Native students.

We know that the curriculum guiding teacher practice makes a difference in the academic lives of students. Language, tradition, and histories of a people shape how and what we learn and who we are to become as intellectual, political, and social beings. Donald Oliver and Kathleen Gershman point to an unconscious connection between what is known and the holder of that knowledge, the knower. It is this relationship that becomes essential in the act of teaching. The known, the curriculum, should not be separated from the knower, the teacher.[36]

Research in schools serving Native communities has consistently demonstrated the importance of culture in the learning process. Equally important is a sense of ownership—a kind of belonging, a familiarity with what is being taught. For Native people, oral traditions are important, language is important, social relationships are important. As time takes Native society away from the immediate and detrimental effects of the boarding school era, there is still a need to keep a conscious watch over the progression of education as well as how educators view curricula, practice, and the students who are affected by them.

More research is needed on the effects of culturally appropriate curriculum on achievement, as measured by authentic or alternative measures. Rough Rock Demonstration and Kickapoo Nation schools have showcased how culture and language produce a positive relationship with higher academic performance.[37] More schools need to demonstrate this correlation. In addition to linking culturally appropriate curricula to assessment, further study is needed about how teachers *define* and *implement* a culturally appropriate curriculum.

American Indian students attend various types of schools: public, BIA-funded (boarding and day, grant, and contact), charter, private off-reservation, rural, and urban. American Indian students in these environments are bombarded with a multitude of potentially delimiting factors including, but not limited to, language, majority socialization practices, and values. It is difficult to say to what degree each factor impacts a student's ability to adapt to the curriculum and learning environment. Ogbu suggests some individuals come to accept a role in the larger society not defined by their own culture (this being the precise reason successful students are inclined to adapt). Donna Deyhle's and Dennis McInerney and Karen Swisher's re-

search emphasizes that individual perceptions of and motivation to complete school extend beyond influences of cultural background. Theoretical and applied research focusing on curricula and Native education over the past 25 years reveals that culture influences teaching and learning. We can assume there is a direct relationship among culture, curriculum, and learning in American Indian schooling experiences. But to what degree? We do not know.[38]

Educational research appears to lack primary research that targets contemporary issues in American Indian education such as the educational experiences of urban Indian cultures.[39] Cultural considerations in American Indian education go far beyond culturally appropriate curricula; they reach into the hearts of Indian youth, who have to sift through what is taught to find themselves, their roles, and eventually the purpose of education.

Gaps in the research reveal questions and debates to be further considered: Should we use Native languages to teach concepts and values of the dominant American culture? Should we teach students how to learn in ways valued by American society for the sole purpose of improving academic gains as measured by standardized tests? Finally if we, as Native people, are truly going to determine for ourselves the goals of education, we need to continue engaging in careful consideration of how Native children become successful and active members of individual tribal societies as well as the larger society. There is an inherent view of how Native youth perceive themselves and their roles in two societies; educators cannot lose sight of it. Does this mean, as Ogbu suggests, that as involuntary minorities, American Indian students accept the American system and assimilate? Or can American Indian students succeed academically, as Trueba suggests, without losing their sense of identity and the culture in which it is deeply rooted? These questions need further thought and discussion in the schools, in the community, and within and among societies. Improved educational opportunities can be and are realized by Indian people conducting and building educational programs and curricula for their own people. John Chilcott writes, "The solution to accommodation must lie within the ethnic population itself rather than the school." Indian educators and researchers are addressing some of the concerns and questions that Native communities and people want answered.[40]

The link between curricula and culture is conceptualized differently by diverse populations. Each community, school, and tribe needs to establish its own definition and direction for how culture will play a role in the education of its youth. Our own communities can make a difference in the selection of research topics and the influence educational research will have on instruction, curricula, and educational programs. With community-directed purpose, research can presumably have a positive impact for Native students.

The extant research evidence demonstrates that American Indian students are not culturally disadvantaged or deficient but are subject to factors beyond their control that impact learning. A powerful factor affecting performance is the schools' lack of attention to meeting the needs of Native students. Because of the likelihood that Native societies will continue to change in response to technology and greater exposure to European American values and beliefs, educators are reminded that use of published works needs to be continuously investigated, challenged, and rethought. It is impossible that American Indian students are not affected by the instant and ever-ready exchange of information. We can assume that media and exposure to other cultures are strong influences on how curricula are developed and how Native children come to incorporate new information into what they already know.[41]

Evelyn Jacob and Cathie Jordan remind educators that although researchers have identified cultural discrepancies between the school performance of European American students and many ethnic minority students, dialogue has been limited about processes of engaging in appropriate reform.[42] There is already a wealth of knowledge with regard to cultural considerations for teaching, learning, and curriculum development. The question now is where do we go from here? What can research and current practice in schools tell us about the current situation in which American Indian students find themselves? This question can only be answered by carefully examining past research and practice that emphasize culture in curricula, and looking critically at how knowledge is defined by varying societies and education agents. A culturally appropriate curriculum is the building block to achieving a challenging, relevant, thought provoking, and most importantly responsive education for Native children in American schools.

Notes

1. Tarajean Yazzie (Navajo) is a doctoral student in the Harvard Graduate School of Education Learning and Teaching Program. She would like to thank Karen Gayton Swisher and John Tippeconnic III for their editorial support and patience. She would also like to thank the anonymous reviewers who provided careful reviews and thoughtful suggestions.

2. See "Constructing Failure and Maintaining Cultural Identity," 24- 27; McInerney and Swisher, "Exploring Navajo Motivation," 28-51; McQuiston and Brod, "Structural and Cultural Conflict," 48-58; Philips, *The Invisible Culture*; and Spang, "Eight Problems in Indian Education," 1-4.

3. Oliver and Gershman, "Knowing as Participant," 69.

4. The term *culture*, in the education research reviewed for this chapter, is used loosely to encompass a wide array of behaviors associated with any particular group of individuals. Longstreet, in *Aspects of Ethnicity*, provides a thorough explanation of behaviors that demonstrate belonging to a particular group of people. She carefully discusses aspects of ethnicity as verbal communication, nonverbal communication, orientation modes, social value patterns, and intellectual modes. In this chapter, *culture* refers to any or all of these "aspects of ethnicity." When appropriate, specific behaviors will be highlighted. Native language, for example, is the focus of many cultural education programs.

5. Bruner, *The Culture of Education*, 3.

6. See Kawagley, *A Yupiaq Worldview*.

7. See Longstreet and Shane, *Curriculum for a New Millennium* (Needham Heights: Allyn & Bacon, 1993).

8. See Adams, "Fundamental Considerations, 1-28; Hamley, "Cultural Genocide in the Classroom"; Lomawaima, "Educating Native Americans"; Lomawaima, "The Unnatural History of American Indian Education"; and Soto, *Language, Culture and Power*.

9. Locust, "Wounding the Spirit," 315.

10. Institute for Government Research, *The Problem of Indian Administration*, 346.

11. See Erickson, "Transformation and School Success," 335-56; Philips, "Participant Structures and Communicative Competence"; Philips, *Invisible Culture*; and Henry T. Trueba, "Culturally Based Explanations of Minority Students' Academic Achievement," 270-87.

12. See Erickson, "Transformation and School Success"; Philips, "Participant Structures"; Philips, *Invisible Culture*; Greenbaum and Greenbaum, "Cultural Differences, Nonverbal Regulation, and Classroom Interaction," 16-33; Van Ness, "Social Control and Social Organization"; and Cleary and Peacock, *Collected Wisdom*.

13. Trueba, "Culturally Based Explanations," 282.

14. See Philips, "Participant Structures."

15. See Greenbaum, "Nonverbal Differences in Communication Style," 101-15; Greenbaum and Greenbaum, "Cultural Differences"; Mohatt and Erickson, "Cultural Differences in Teaching Styles"; Philips, "Participant Structures"; and Philips, *Invisible Culture.*

16. See Deyhle, "Constructing Failure"; Jacob and Jordan, "Moving to Dialogue," 259-61; McQuiston and Brod, "Structural and Cultural Conflict"; Danielle Sanders, "Cultural Conflicts," 81-89; Spang, "Eight Problems"; Swisher and Deyhle, "The Styles of Learning Are Different," 1-14; and Wright, Hirlinger, and England, *The Politics of Second Generation Discrimination in American Indian Education.*

17. Butterfield, "The Development and Use of Culturally Appropriate Curriculum," 50. See also Gipp and Fox, "Promoting Cultural Relevance," 58-64; Kawagley, *Yupiaq Worldview;* Skinner, "Teaching through Traditions"; Worrest, "Curriculum Development at Pretty Eagle School"; Youpa, Epaloose, and Tharp, "Family and Community Involvement"; and Stokes, "Curriculum for Native American Students," 576-84.

18. McQuiston and Brod, "Structural and Cultural Conflict," 29; Ogbu, "Variability in Minority School Performance," 330. Ogbu categorizes minorities in the United States into two groups, voluntary or involuntary. Voluntary minorities generally enter their minority status as immigrants, whereas involuntary minorities, such as African Americans and American Indians, enter their status under circumstances forced upon them.

19. Erickson, "Transformation and School Success," 337.

20. See Mohatt and Erickson, "Cultural Differences"; Plank, "What Silence Means," 3-19; Swisher and Deyhle, "Styles of Learning"; Philips, "Participant Structures"; Philips, *Invisible Culture;* and Vogt, Jordan, and Tharp, "Explaining School Failure, Producing School Success," 276-86.

21. See Birchard, *Attitudes Toward Indian Culture.*

22. Biglin and Wilson, "Parental Attitudes Toward Indian Education," 2. See also Steele, "Mohawk Cultural Perspectives."

23. McCarty and others, "Classroom Inquiry and Navajo Learning Styles," 42.

24. Trueba, "Culturally Based Explanations," 281.

25. See McCarty, "Language Use by Yavapai-Apache Students," 1-9.

26. Schindler and Davison, "Language, Culture, and the Mathematics Concepts of American Indian Learners," 32-33.

27. See Hakes and others, *Curriculum Improvement for Pueblo Indian Students.*

28. See Tippeconnic, "Editorial . . . On BIA Education," 1-5.

29. Lipka, "A Cautionary Tale of Curriculum Development," 216. Lipka's Bayuq community is a fictitious composite village in the Bristol Bay region of Alaska. For research on culturally appropriate curricula, see Gipp and Fox, "Promoting Cultural Relevance"; Worrest, "Curriculum Development"; Butterfield, "Development and Use"; and Tippeconnic, "Training Teachers of American Indian Students," 6-15.

30. Stokes, "Curriculum for Native American Students," 579.

31. Lipka, "Cautionary Tale," 224.

32. See Vogt, Jordan, and Tharp, "Explaining School Failure."

33. For information on curriculum development and implementation, see Cotton and Savard, *Native American Education*; Gipp and Fox, "Promoting Cultural Relevance"; J. S. Kleinfeld, "Intellectual Strengths in Culturally Different Groups," 341-59; More, "Native Indian Learning Styles," 15-28; Swisher and Deyhle, "Styles of Learning"; and Stokes, "Curriculum for Native American Students."

34. Tippeconnic, "Training Teachers," 6. For studies on effective teacher characteristics, see Deyhle, "Constructing Failure"; Kleinfeld, *Effective Teachers of Indian and Eskimo High School Students*; Kleinfeld, McDiarmid, Grubis, and Parrett, "Doing Research on Effective Cross-Cultural Teaching," 86-108; Philips, "Participant Structures"; Scollon and Scollon, *Narrative, Literacy, and Face in Interethnic Communication*; Van Ness, "Social Control"; and Lipka, "Cautionary Tale."

35. See Freire, *Teachers as Cultural Workers*.

36. See Oliver and Gershman, "Knowing as Participant."

37. Dupuis and Walker, "The Circle of Learning at Kickapoo," 27-33 and McCarty, "School as Community," 484-503.

38. See Ogbu, "Variability"; Deyhle, "Measuring Success and Failure in the Classroom," 67-85; and McInerney and Swisher, "Exploring Navajo Motivation."

39. See Deyhle and Swisher, "Research in American Indian Education."

40. Chilcott, "Yaqui World View and the School, 22. See also Ogbu, "Variability"; Robbins and Tippeconnic, *Research in American Indian Education*; Stokes, "Curriculum for Native American Students"; and Swisher, "Why Indian People Should Be the Ones to Write about Indian Education," 1-8.

41. See Greenbaum and Greenbaum, "Cultural Differences"; Locust, "Wounding the Spirit"; Philips, "Participant Structures"; Philips, *Invisible Culture;* Spang, "Eight Problems"; Deyhle, "Constructing Failure"; McInerney and Swisher, "Exploring Navajo Motivation"; and Wright, Hirlinger, and England, *Politics of Second Generation Discrimination*.

42. See Jacob and Jordan, "Moving to Dialogue."

Bibliography

Adams, David Wallace. "Fundamental Considerations: The Deep Meaning of Native American Schooling, 1880-1900." *Harvard Educational Review* 58(1): 1-28 (1988).

Biglin, James E., and Jack Wilson. "Parental Attitudes Toward Indian Education." *Journal of American Indian Education* 11(3): 1-6 (1972).

Birchard, Bruce A. *Attitudes Toward Indian Culture and Its Incorporation in the School Curriculum: Students, Parents, Teachers, and Community Leaders: Perceptions of Indian Education.* Series IV, No. 10, Final Report, National Study of American Indian Education. Washington, DC: Bureau of Research, Office of Education, 1970. ERIC Document Reproduction Service No. ED 047 879.

Bruner, Jerome S. *The Culture of Education.* Cambridge, MA: Harvard University Press, 1996.

Butterfield, Robin A. "The Development and Use of Culturally Appropriate Curriculum for American Indian Students." *Peabody Journal of Education* 61(1): 49-66 (1983).

Chilcott, John H. "Yaqui World View and the School: Conflict and Accommodation." *Journal of American Indian Education* 24(1): 21-32 (1985).

Cleary, Linda Miller, and Thomas D. Peacock. *Collected Wisdom: American Indian Education.* Needham Heights: Allyn & Bacon, 1998.

Cotton, Kathleen, and W. G. Savard. *Native American Education: Topic Summary Report.* Portland, OR: Northwest Regional Educational Laboratory, 1981. ERIC Document Reproduction Service No. ED 214 700.

Deyhle, Donna. "Constructing Failure and Maintaining Cultural Identity: Navajo and Ute School Leavers." *Journal of American Indian Education* 31(2): 24-27 (1992).

———. "Measuring Success and Failure in the Classroom: Teacher Communication about Tests and the Understanding of Young Navajo Students." *Peabody Journal of Education* 61(1): 67-85 (1983).

Deyhle, Donna, and Karen Swisher. "Research in American Indian Education and Alaska Native Education: From Assimilation to Self- Determination." In *Review of Research in Education,* vol. 22, edited by Michael W. Apple. Washington, DC: American Educational Research Association, 1997.

Dupuis, Victor L., and Margery W. Walker. "The Circle of Learning at Kickapoo." *Journal of American Indian Education* 28(1): 27-33 (1988).

Erickson, Frederick. "Transformation and School Success: The Politics and Culture of Educational Achievement." *Anthropology and Education Quarterly* 18(4): 335-56 (1987).

Freire, Paulo. *Teachers as Cultural Workers: Letters to Those Who Dare Teach.* Boulder, CO: Westview Press, 1988.

Gipp, Gerald E., and Sandra J. Fox. "Promoting Cultural Relevance in American Indian Education." *Education Digest* 57(3): 58-64 (1991).

Greenbaum, Paul E. "Nonverbal Differences in Communication Style between American Indian and Anglo Elementary Classrooms." *American Education Research Journal* 22(1): 101-15 (1985).

Greenbaum, Paul E., and Susan D. Greenbaum. "Cultural Differences, Nonverbal Regulation, and Classroom Interaction: Sociolinguistic Interference in American Indian Education." *Peabody Journal of Education* 61(1): 16-33 (1983).

Hakes, Judith A., and others. *Curriculum Improvement for Pueblo Indian Students: A Pilot Study.* Albuquerque: All Indian Pueblo Council, 1980. ERIC Document Reproduction Service No. ED 190 283.

Hamley, Jeffrey L. "Cultural Genocide in the Classroom: A History of the Federal Boarding School Movement in American Indian Education, 1875-1920." Ed.D. diss., Harvard Graduate School of Education, 1994.

Institute for Government Research. *The Problem of Indian Administration: Report of a Survey Made at the Request of Honorable Hubert Work, Secretary of the Interior, and Submitted to Him, February 21, 1928.* Baltimore: Johns Hopkins Press, 1928. Reprint, New York: Johnson Reprint, 1971.

Jacob, Evelyn, and Cathie Jordan. "Moving to Dialogue." *Anthropology and Education Quarterly* 18(4): 259-61 (1987).

Kawagley, Oscar A. *A Yupiaq Worldview: A Pathway to Ecology and Spirit.* Prospect Heights, IL: Waveland Press, 1995.

Kleinfeld, Judith. *Effective Teachers of Indian and Eskimo High School Students.* Fairbanks: Center for Northern Educational Research; University of Alaska, Institute of Social, Economic and Government Research, 1972. ERIC Document Reproduction Service No. ED 068 246.

Kleinfeld, Judith, G. Williamson McDiarmid, Steve Grubis, and William Parrett. "Doing Research on Effective Cross-Cultural Teaching: A Teacher Tale." *Peabody Journal of Education* 61(1): 86-108 (1983).

Kleinfeld, J. S. "Intellectual Strengths in Culturally Different Groups: An Eskimo Illustration." *Review of Educational Research* 43(3): 341-59 (1973).

Lipka, Jerry M. "A Cautionary Tale of Curriculum Development in Yup'ik Eskimo Communities." *Anthropology and Education Quarterly* 20(3): 216-31 (1989).

———. "Toward a Culturally Based Pedagogy: A Case Study of One Yup'ik Eskimo Teacher." *Anthropology and Education Quarterly* 22(3): 203-23 (1991).

Locust, Carol. "Wounding the Spirit: Discrimination and Traditional American Indian Belief Systems." *Harvard Educational Review* 58(3): 315-30 (1988).

Lomawaima, K. Tsianina. "Educating Native Americans." In *Handbook of Research on Multicultural Education,* edited by James A. Banks and Cherry A. McGee. New York: Macmillian, 1995.

———. "The Unnatural History of American Indian Education." In *Next Steps:*

BEST COPY AVAILABLE

Research and Practice to Advance Indian Education, edited by Karen Gayton Swisher and John Tippeconnic III. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools, 1999.

Longstreet, Wilma S. *Aspects of Ethnicity: Understanding Differences in Pluralistic Classrooms*. New York: Teachers College Press, 1978.

Longstreet, Wilma S., and Harold G. Shane. *Curriculum for a New Millennium*. Needham Heights: Allyn & Bacon, 1993.

McCarty, Teresa L. "Language Use by Yavapai-Apache Students with Recommendations for Curriculum Design." *Journal of American Indian Education* 20(1): 1-9 (1980).

———. "School as Community: The Rough Rock Demonstration." *Harvard Educational Review* 59(4): 484-503 (1989).

McCarty, Teresa L., and others. "Classroom Inquiry and Navajo Learning Styles: A Call for Reassessment." *Anthropology and Education Quarterly* 22(1): 42-59 (1991).

McInerney, Dennis M., and Karen Gayton Swisher. "Exploring Navajo Motivation in School Settings." *Journal of American Indian Education* 34(3): 28-51 (1995).

McQuiston, John M., and Rodney L. Brod. "Structural and Cultural Conflict in American Indian Education." *Journal of Thought* 19(3): 48-58 (1984).

Mohatt, Gerald V., and Frederick Erickson. "Cultural Differences in Teaching Styles in an Odawa School: A Sociolinguistic Approach." In *Culture and the Bilingual Classroom*, edited by Henry T. Trueba, Grace Pung Guthrie, and Kathryn Hu-Pei Au. Rowley, MA: Newbury House, 1981.

More, Arthur J. "Native Indian Learning Styles: A Review for Researchers and Teachers." *Journal of American Indian Education*, special issue (August 1989): 15-28.

Noley, Grayson. "Native and Non-Native Teachers and Administrators for Elementary and Secondary Schools Serving Native Students." In *Indian Nations At Risk: Solutions for the 1990s*, edited by G. Michael Charleston. Washington, DC: Hemispheric Publishing, 1991.

Ogbu, John U. "Variability in Minority School Performance: A Problem in Search of an Explanation." *Anthropology and Education Quarterly* 18(4): 312-34 (1987).

Oliver, Donald W., and Kathleen K. Gershman. "Knowing as Participant." *Journal of Curriculum Theorizing* 10(2): 69-100 (1992).

Philips, Susan Urmstrom. *The Invisible Culture: Communication in Classroom and Community on the Warm Springs Reservation*. New York: Longman, 1983.

———. "Participant Structures and Communicative Competence: Warm Springs Children in Community and Classroom." In *Functions of Language in the Classroom*, edited by Courtney B. Cazden, Vera P. John, and Dell Hymes. New York: Teachers College Press, 1972.

Plank, Gary A. "What Silence Means for Educators of American Indian Children." *Journal of American Indian Education* 34(1): 3-19 (1994).

BEST COPY AVAILABLE

Robbins, Rebecca, and John Tippeconnic III. *Research in American Indian Education.* Tempe, AZ: Center for Indian Education, 1985.

Sanders, Danielle. "Cultural Conflicts: An Important Factor in Academic Failures of American Indian Students." *Journal of Multicultural Counseling and Development* 18(15): 81-89 (1987).

Schindler, Duane E., and David M. Davison. "Language, Culture, and the Mathematics Concepts of American Indian Learners." *Journal of American Indian Education* 24(3): 27-34 (1985).

Scollon, Ronald, and Suzanne B. K. Scollon. *Narrative, Literacy, and Face in Interethnic Communication.* Norwood, NJ: Ablex Pub. Corp., 1981.

Skinner, Linda. "Teaching through Traditions: Incorporating Languages and Culture into Curricula." In *Next Steps: Research and Practice to Advance Indian Education,* edited by Karen Gayton Swisher and John Tippeconnic III. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools, 1999.

Soto, Lourdes Diaz. *Language, Culture and Power: Bilingual Families and the Struggle for Quality Education.* Albany: State University of New York Press, 1996.

Spang, Alonzo. "Eight Problems in Indian Education." *Journal of American Indian Education* 10(1): 1-4 (1970).

Steele, C. L. "Mohawk Cultural Perspectives: A Curriculum Database for Mohawk Cross-Cultural Curriculum." Ph.D. diss., State University of New York at Albany, 1986.

Stokes, Sandra M. "Curriculum for Native American Students: Using Native American Values." *The Reading Teacher* 50(7): 576-84 (1997).

Swisher, Karen Gayton. "Why Indian People Should Be the Ones to Write about Indian Education." *American Indian Quarterly* 20(1): 1-8 (1996).

Swisher, Karen, and Donna Deyhle. "The Styles of Learning Are Different, but the Teaching Is Just the Same: Suggestions for Teachers of American Indian Youth." *Journal of American Indian Education,* special issue (August 1989): 1-14.

Tippeconnic, John W., III. "Editorial . . . On BIA Education." *Journal of American Indian Education* 35(1): 1-5 (1995).

———. "Training Teachers of American Indian Students." *Peabody Journal of Education* 61(1): 6-15 (1983).

Trueba, Henry T. "Culturally Based Explanations of Minority Students' Academic Achievement." *Anthropology and Education Quarterly* 19(3): 270-87 (1988).

Van Ness, H. "Social Control and Social Organization in an Alaskan Athabaskan Classroom: A Microethnography of 'Getting Ready' for Reading." In *Culture and the Bilingual Classroom,* edited by Henry T. Trueba, Grace Pung Guthrie, and Kathryn Hu-Pei Au. Rowley, MA: Newbury House, 1981.

Vogt, Lynn A., Cathie Jordan, and Roland G. Tharp. "Explaining School Failure, Producing School Success: Two Cases." *Anthropology and Education Quarterly* 18(4): 276-86 (1987).

Worrest, Henry N. "Curriculum Development at Pretty Eagle School: Some Success and Some Problems." Paper presented at the Joint Meeting of the Annual Rural and Small Schools Conference and Kansas Community Education Association in Manhattan, KS, November 15-16, 1982.

Wright, David E., Michael W. Hirlinger, and Robert E. England. *The Politics of Second Generation Discrimination in American Indian Education: Incidence, Explanation, and Mitigating Strategies.* Westport, CT: Bergin & Garvey, 1998.

Youpa, Daniel G., Georgia Epaloose, and Roland G. Tharp. "Family and Community Involvement in the Zuni Public Schools." Paper presented at the meeting of the American Educational Research Association, San Diego, April 13-17, 1998.

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